

What is claimed is:

1. A method of driving the coil of an electrohydraulic valve with a PWM drive, comprising:  
transmitting a feedback signal to a digitizing device that  
is electrically connected to the electrohydraulic  
valve;  
sampling the feedback signal within the digitizing device  
to create a plurality of signal samples;  
transmitting the plurality of samples to an accumulator;  
averaging the plurality of samples within the accumulator  
to create an average value; and  
transmitting the average value to a closed loop control  
algorithm that generates a pulse width signal to drive  
the coil of the electrohydraulic valve.
2. The method of claim 1 wherein the digitizing device is  
an AtoD converter.
3. The method of claim 1 wherein the digitizing device is  
a DSP.
4. The method of claim 1 wherein the digitizing device is  
a micro controller.
5. The method of claim 1 wherein the algorithm is a PI  
algorithm.
6. The method of claim 1 wherein the algorithm is a PID  
algorithm.

7. The method of claim 1 wherein the accumulator resets when the algorithm sends the pulse width signal to the coil of the electrohydraulic valve.

8. A method of driving a pulse width modulator comprising:  
transmitting a feedback signal from the pulse width modulator to a finite impulse response filter;  
calculating an average current in the signal with the finite impulse response filter; and  
generating a pulse width signal in response the average current in the signal via an algorithm.

9. A method of driving the electric coil of a machine with a pulse width modulator comprising:  
transmitting a feedback signal to a digitizing device that is electrically connected to the electric coil of the machine;  
calculating the amount of average current in the coil with the digitizing device;  
transmitting the average current amount to an algorithm;  
generating a pulse width signal in response to the average current in the coil with the algorithm.